

 **Sterne Kessler  
Goldstein-Fox**  
ATTORNEYS AT LAW



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Tracy-Gene G. Durkin  
Michele A. Cimbalà  
Michael B. Ray  
Robert E. Sokohl  
Eric K. Steffe  
Michael Q. Lee  
Steven R. Ludwig  
John M. Covert  
Linda E. Alcorn  
Robert C. Millonig  
Lawrence B. Bugalsky  
Donald J. Featherstone  
Michael V. Messinger

Judith U. Kim  
Timothy J. Shea, Jr.  
Patrick E. Garrett  
Jeffery T. Helvey  
Heidi L. Kraus  
Crystal D. Sayles  
Edward W. Yee  
Albert L. Ferro  
Donald R. Banowitz  
Peter A. Jackman  
Molly A. McCall  
Teresa U. Medler  
Jeffrey S. Weaver  
Kendrick P. Patterson  
Vincent L. Capuano  
Albert J. Fasulo II  
Eldora Ellison Floyd  
W. Russell Swindell

Thomas C. Fiala  
Brian J. Del Buono  
Virgil Lee Beaston  
Reginald D. Lucas  
Kimberly N. Reddick  
Theodore A. Wood  
Elizabeth J. Haanes  
Bruce E. Chalker  
Joseph S. Ostroff  
Frank R. Cottingham  
Christine M. Lhulier  
Rae Lynn Pngaman  
Jane Shershenovich  
Lawrence J. Carroll  
George S. Bardmesser  
Rodney G. Maze

Registered Patent Agents\*  
Karen R. Markowicz  
Andrea J. Kamage  
Nancy J. Leith  
Ann E. Summerfield  
Helene C. Carlson  
Gaby L. Longworth  
Matthew J. Dowd  
Aaron L. Schwartz  
Angelique G. Uy  
Boris A. Matvenko  
Mary B. Tung  
Katrina Y. Pei  
Bryan L. Skelton  
Robert A. Schwartzman  
Jason D. Eisenberg  
John J. Figueroa

Senior Counsel  
Samuel L. Fox  
Kenneth C. Bass III  
Lisa A. Dunner

Admitted only in Maryland  
Admitted only in Virginia  
Admitted only in Texas  
Practice Limited to  
Federal Agencies

2822  
RECEIVED  
SEP - 3 2002  
TECHNOLOGY CENTER 2800

August 29, 2002.

WRITER'S DIRECT NUMBER:  
(202) 218-7831  
INTERNET ADDRESS:  
JWEAVER@SKGF.COM

Commissioner for Patents  
Washington, D.C. 20231

**Art Unit 2822**

Re: U.S. Utility Patent Application  
Appl. No. 09/849,537; Filed: May 7, 2001  
For: **Die-Up Ball Grid Array Package With A Heat Spreader and Method  
for Making the Same**  
Inventors: Zhang *et al.*  
Our Ref: 1875.0370000

Sir:

Transmitted herewith for appropriate action are the following documents:

1. PTO Fee Transmittal (Form PTO/SB/17);
2. Second Supplemental Information Disclosure Statement;
3. List of cited references on Form PTO-1449 (1 sheet);
4. Copies of cited references on Form PTO-1449 (AA1, AB1, AC1, AD1, AE1, AJ1, AK1, AL1, AN1, AO1, AP1, and AQ1);
5. Return postcard; and
6. Our check number 364163 for \$180.00 to cover fee for submission of IDS.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are

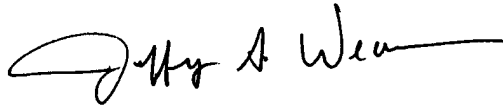
Commissioner for Patents  
August 29, 2002  
Page 2

necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

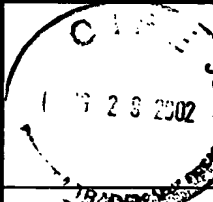

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



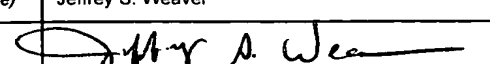
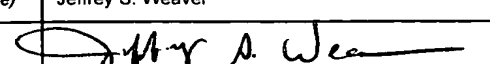
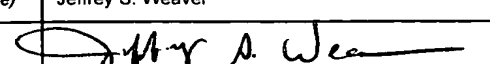
Jeffrey S. Weaver  
Attorney for Applicants  
Registration No. 45,608

JSW/asl  
Enclosures

SKGF\_DC1:50930.1

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><b>FEE TRANSMITTAL</b> <b>for FY 2002</b></p> <p><small>Patent fees are subject to annual revision.</small></p> </div> <div style="text-align: center;">  </div> </div>		<b>Complete if Known</b>													
<b>TOTAL AMOUNT OF PAYMENT</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>09/849,537</td> </tr> <tr> <td>Filing Date</td> <td>May 7, 2001</td> </tr> <tr> <td>First Named Inventor</td> <td>Tonglong Zhang</td> </tr> <tr> <td>Examiner Name</td> <td>Monica Lewis</td> </tr> <tr> <td>Group Art Unit</td> <td>2822</td> </tr> <tr> <td>Attorney Docket No.</td> <td>1875.0370000</td> </tr> </table>		Application Number	09/849,537	Filing Date	May 7, 2001	First Named Inventor	Tonglong Zhang	Examiner Name	Monica Lewis	Group Art Unit	2822	Attorney Docket No.	1875.0370000
Application Number	09/849,537														
Filing Date	May 7, 2001														
First Named Inventor	Tonglong Zhang														
Examiner Name	Monica Lewis														
Group Art Unit	2822														
Attorney Docket No.	1875.0370000														
(\$) <b>180.00</b>															

<b>METHOD OF PAYMENT (check one)</b>  1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:  <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">                     Deposit Account Number: 19-0036                      Deposit Account Name: Sterne, Kessler, Goldstein &amp; Fox P.L.L.C.                 </div> <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17  <input type="checkbox"/> Applicant claims small entity status See 37 CFR 1.27  2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input checked="" type="checkbox"/> Other* <small>*Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.</small>	<b>FEE CALCULATION (continued)</b>  <b>3. ADDITIONAL FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>105</td> <td>130</td> <td>205</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> </tr> <tr> <td>127</td> <td>50</td> <td>227</td> <td>25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> </tr> <tr> <td>139</td> <td>130</td> <td>139</td> <td>130</td> <td>Non-English specification</td> </tr> <tr> <td>147</td> <td>2,520</td> <td>147</td> <td>2,520</td> <td>For filing a request for <i>ex parte</i> reexamination</td> </tr> <tr> <td>112</td> <td>920*</td> <td>112</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> </tr> <tr> <td>113</td> <td>1,840*</td> <td>113</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> </tr> <tr> <td>115</td> <td>110</td> <td>215</td> <td>55</td> <td>Extension for reply within first month</td> </tr> <tr> <td>116</td> <td>400</td> <td>216</td> <td>200</td> <td>Extension for reply within second month</td> </tr> <tr> <td>117</td> <td>920</td> <td>217</td> <td>460</td> <td>Extension for reply within third month</td> </tr> <tr> <td>118</td> <td>1,440</td> <td>218</td> <td>720</td> <td>Extension for reply within fourth month</td> </tr> <tr> <td>128</td> <td>1,960</td> <td>228</td> <td>980</td> <td>Extension for reply within fifth month</td> </tr> <tr> <td>119</td> <td>320</td> <td>219</td> <td>160</td> <td>Notice of Appeal</td> </tr> <tr> <td>120</td> <td>320</td> <td>220</td> <td>160</td> <td>Filing a brief in support of an appeal</td> </tr> <tr> <td>121</td> <td>280</td> <td>221</td> <td>140</td> <td>Request for oral hearing</td> </tr> <tr> <td>138</td> <td>1,510</td> <td>138</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> </tr> <tr> <td>140</td> <td>110</td> <td>240</td> <td>55</td> <td>Petition to revive - unavoidable</td> </tr> <tr> <td>141</td> <td>1,280</td> <td>241</td> <td>640</td> <td>Petition to revive - unintentional</td> </tr> <tr> <td>142</td> <td>1,280</td> <td>242</td> <td>640</td> <td>Utility issue fee (or reissue)</td> </tr> <tr> <td>143</td> <td>460</td> <td>243</td> <td>230</td> <td>Design issue fee</td> </tr> <tr> <td>144</td> <td>620</td> <td>244</td> <td>310</td> <td>Plant issue fee</td> </tr> <tr> <td>122</td> <td>130</td> <td>122</td> <td>130</td> <td>Petitions to the Commissioner</td> </tr> <tr> <td>123</td> <td>130</td> <td>123</td> <td>130</td> <td>Petitions related to provisional applications</td> </tr> <tr> <td>126</td> <td>180</td> <td>126</td> <td>180</td> <td>Submission of Information Disclosure Stmt</td> </tr> <tr> <td>581</td> <td>40</td> <td>481</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> </tr> <tr> <td>146</td> <td>740</td> <td>246</td> <td>370</td> <td>Filing a submission after final rejection (37 CFR 1.129(a))</td> </tr> <tr> <td>149</td> <td>740</td> <td>249</td> <td>370</td> <td>For each additional invention to be examined (37 CFR 1.129(b))</td> </tr> <tr> <td>179</td> <td>740</td> <td>279</td> <td>370</td> <td>Request for Continued Examination (RCE)</td> </tr> <tr> <td>169</td> <td>900</td> <td>169</td> <td>900</td> <td>Request for expedited examination of a design application</td> </tr> </tbody> </table> <p>Other fee (specify): _____                  Other fee (specify): _____                  *Reduced by Basic Filing Fee Paid</p>	Large Entity		Small Entity		Fee Description	Fee Code	Fee (\$)	Fee Code	Fee (\$)	105	130	205	65	Surcharge - late filing fee or oath	127	50	227	25	Surcharge - late provisional filing fee or cover sheet	139	130	139	130	Non-English specification	147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	112	920*	112	920*	Requesting publication of SIR prior to Examiner action	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	115	110	215	55	Extension for reply within first month	116	400	216	200	Extension for reply within second month	117	920	217	460	Extension for reply within third month	118	1,440	218	720	Extension for reply within fourth month	128	1,960	228	980	Extension for reply within fifth month	119	320	219	160	Notice of Appeal	120	320	220	160	Filing a brief in support of an appeal	121	280	221	140	Request for oral hearing	138	1,510	138	1,510	Petition to institute a public use proceeding	140	110	240	55	Petition to revive - unavoidable	141	1,280	241	640	Petition to revive - unintentional	142	1,280	242	640	Utility issue fee (or reissue)	143	460	243	230	Design issue fee	144	620	244	310	Plant issue fee	122	130	122	130	Petitions to the Commissioner	123	130	123	130	Petitions related to provisional applications	126	180	126	180	Submission of Information Disclosure Stmt	581	40	481	40	Recording each patent assignment per property (times number of properties)	146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))	149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))	179	740	279	370	Request for Continued Examination (RCE)	169	900	169	900	Request for expedited examination of a design application
Large Entity		Small Entity		Fee Description																																																																																																																																																		
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																			
105	130	205	65	Surcharge - late filing fee or oath																																																																																																																																																		
127	50	227	25	Surcharge - late provisional filing fee or cover sheet																																																																																																																																																		
139	130	139	130	Non-English specification																																																																																																																																																		
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination																																																																																																																																																		
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																		
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																		
115	110	215	55	Extension for reply within first month																																																																																																																																																		
116	400	216	200	Extension for reply within second month																																																																																																																																																		
117	920	217	460	Extension for reply within third month																																																																																																																																																		
118	1,440	218	720	Extension for reply within fourth month																																																																																																																																																		
128	1,960	228	980	Extension for reply within fifth month																																																																																																																																																		
119	320	219	160	Notice of Appeal																																																																																																																																																		
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																		
121	280	221	140	Request for oral hearing																																																																																																																																																		
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																		
140	110	240	55	Petition to revive - unavoidable																																																																																																																																																		
141	1,280	241	640	Petition to revive - unintentional																																																																																																																																																		
142	1,280	242	640	Utility issue fee (or reissue)																																																																																																																																																		
143	460	243	230	Design issue fee																																																																																																																																																		
144	620	244	310	Plant issue fee																																																																																																																																																		
122	130	122	130	Petitions to the Commissioner																																																																																																																																																		
123	130	123	130	Petitions related to provisional applications																																																																																																																																																		
126	180	126	180	Submission of Information Disclosure Stmt																																																																																																																																																		
581	40	481	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																		
146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																		
149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																		
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																		
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																		

<b>1. BASIC FILING FEE</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>740</td> <td>201</td> <td>370</td> <td>Utility filing fee</td> <td>_____</td> </tr> <tr> <td>106</td> <td>330</td> <td>206</td> <td>165</td> <td>Design filing fee</td> <td>_____</td> </tr> <tr> <td>107</td> <td>510</td> <td>207</td> <td>255</td> <td>Plant filing fee</td> <td>_____</td> </tr> <tr> <td>108</td> <td>740</td> <td>208</td> <td>370</td> <td>Reissue filing fee</td> <td>_____</td> </tr> <tr> <td>114</td> <td>160</td> <td>214</td> <td>80</td> <td>Provisional filing fee</td> <td>_____</td> </tr> <tr> <td colspan="5" style="text-align: right;"><b>SUBTOTAL (1) (\$)</b></td> <td>_____</td> </tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	101	740	201	370	Utility filing fee	_____	106	330	206	165	Design filing fee	_____	107	510	207	255	Plant filing fee	_____	108	740	208	370	Reissue filing fee	_____	114	160	214	80	Provisional filing fee	_____	<b>SUBTOTAL (1) (\$)</b>					_____	<b>2. EXTRA CLAIM FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>18</td> <td>203</td> <td>9</td> <td>Claims in excess of 20</td> <td>_____</td> </tr> <tr> <td>102</td> <td>84</td> <td>202</td> <td>42</td> <td>Independent claims in excess of 3</td> <td>_____</td> </tr> <tr> <td>104</td> <td>280</td> <td>204</td> <td>140</td> <td>Multiple dependent claim</td> <td>_____</td> </tr> <tr> <td>108</td> <td>84</td> <td>209</td> <td>42</td> <td>**Reissue independent claims over original patent</td> <td>_____</td> </tr> <tr> <td>110</td> <td>18</td> <td>210</td> <td>9</td> <td>**Reissue claims in excess of 20 and over original patent</td> <td>_____</td> </tr> <tr> <td colspan="5" style="text-align: right;"><b>SUBTOTAL (2) (\$)</b></td> <td>_____</td> </tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	103	18	203	9	Claims in excess of 20	_____	102	84	202	42	Independent claims in excess of 3	_____	104	280	204	140	Multiple dependent claim	_____	108	84	209	42	**Reissue independent claims over original patent	_____	110	18	210	9	**Reissue claims in excess of 20 and over original patent	_____	<b>SUBTOTAL (2) (\$)</b>					_____
Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid																																																																																		
101	740	201	370	Utility filing fee	_____																																																																																		
106	330	206	165	Design filing fee	_____																																																																																		
107	510	207	255	Plant filing fee	_____																																																																																		
108	740	208	370	Reissue filing fee	_____																																																																																		
114	160	214	80	Provisional filing fee	_____																																																																																		
<b>SUBTOTAL (1) (\$)</b>					_____																																																																																		
Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid																																																																																		
103	18	203	9	Claims in excess of 20	_____																																																																																		
102	84	202	42	Independent claims in excess of 3	_____																																																																																		
104	280	204	140	Multiple dependent claim	_____																																																																																		
108	84	209	42	**Reissue independent claims over original patent	_____																																																																																		
110	18	210	9	**Reissue claims in excess of 20 and over original patent	_____																																																																																		
<b>SUBTOTAL (2) (\$)</b>					_____																																																																																		
<b>SUBMITTED BY</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Name (Print/Type)</td> <td>Jeffrey S. Weaver</td> </tr> <tr> <td>Signature</td> <td></td> </tr> </table>		Name (Print/Type)	Jeffrey S. Weaver	Signature		<b>Complete (if applicable)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Registration No. (Attorney/Agent)</td> <td>45,608</td> <td style="width: 25%;">Telephone</td> <td>202-371-2600</td> </tr> <tr> <td>Date</td> <td colspan="3">8-29-02</td> </tr> </table>		Registration No. (Attorney/Agent)	45,608	Telephone	202-371-2600	Date	8-29-02																																																																										
Name (Print/Type)	Jeffrey S. Weaver																																																																																						
Signature																																																																																							
Registration No. (Attorney/Agent)	45,608	Telephone	202-371-2600																																																																																				
Date	8-29-02																																																																																						